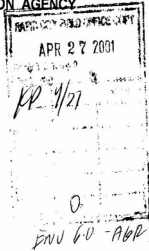




UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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8EPR-EP

VIA FAX AND MAIL

Mr. Kenneth Parr
Bureau of Reclamation
Rapid City Field Office
515 9th Street, Suite 101
Rapid City, South Dakota 57701

RE: Angostura Unit Contract Negotiation and
Water Management Draft Environmental
Impact Statement (DEIS)

Dear Mr. Parr:

In accordance with the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, Environmental Protection Agency (EPA) Region 8 office has reviewed the above-referenced DEIS.

EPA appreciates the opportunity to comment on this document and compliments the Bureau of Reclamation (BOR) on the considerable effort undertaken to provide a good range of alternatives and meaningful public involvement in this process. EPA especially appreciates the BOR's presentation of a reasonable range of alternatives which was evidently designed to give the public and decision-makers options to the current contract for serious consideration and analysis. However, as we indicated in our phone conversation of April 26, 2001, EPA concerns remain about the lack of mitigation for each alternative, and inadequate disclosure of direct, indirect and cumulative impacts for each of the alternatives.

1. [Mitigation should have been presented in the DEIS and, at a minimum, an explanation of BOR's plan for addressing mitigation should have been outlined in the DEIS.] The Council on Environmental Quality's (CEQ) regulations, 40 CFR 1502.14 states that "agencies shall: (f) Include appropriate mitigation measures not already included in the proposed action or alternatives," and 40 CFR 1502.16 states, "[The EIS] shall include discussions of: (a) Direct effects and their significance, (b) Indirect effects and their significance, (h) Means to mitigate adverse environmental impacts (if not fully covered under section 1502.14 (f))." Also, the DEIS does not present a preferred alternative. Through conversations with BOR, EPA understands that it is BOR's intention to wait until the final EIS to identify a preferred alternative. It is also EPA's understanding from our conversations that when the preferred alternative is presented, it will



include mitigation.

BOR's analysis includes presentation of direct and indirect impacts to nine major natural resource categories, two additional categories of social and economic conditions, and Indian trust assets. However, EPA has identified additional direct, indirect and cumulative impacts associated with each alternative. Additionally, the cumulative impacts analysis has only identified future cumulative impacts from other projects. The cumulative impacts analysis should focus on the impacts related to or caused by the proposed action(s) regardless of whose actions cause the cumulative impact to resources (40 CFR 1508.7). EPA requests that these additional direct and indirect impacts be addressed and that a full cumulative (past, present and future) impacts analysis be performed for each alternative for each significant resource. Clarifying information on these recommendations is presented in the enclosed, detailed, EPA comments.

Because no preferred alternative has been presented, EPA has rated each alternative. All alternatives were given the same rating, EC-2 (environmental concerns - inadequate information). Because of inadequate information on the environmental impacts discussed above and because there was no mitigation or explanation of the proposed mitigation approach presented in the DEIS, EPA is unable to provide its environmentally preferred alternative. A copy of EPA's rating criteria is enclosed.

Thank you for the opportunity to comment. We look forward to working with your office to address our concerns. If you have any questions, please contact Jim Berkley at (303) 312-7102.

Sincerely,

Cynthia Cody, Chief
NEPA Unit
Ecosystem Protection Program

Enclosures

cc: Kim Clausen, Ogalala Sioux Tribe

1. Reclamation designed mitigation into the Improved Efficiencies Alternative, which has been selected as the Preferred Alternative. This alternative would include measures to institute BMPs and to implement water conservation, would make water available for other uses besides irrigation, and would set up a public process to determine uses for the saved water (see pp. 22-24 in the EIS). Furthermore, the analyses in the EIS determined that impacts of the Improved Efficiencies Alternative wouldn't be significant and thus don't warrant mitigation beyond those described in the alternative.

EPA's Detailed Comments

As Council on Environmental Quality (CEQ) regulations (40 CFR 1508.25 (c)) state, "[A]gencies shall consider ... 3 types of impacts. They include...Impacts, which may be: (1) Direct, (2) indirect, (3) cumulative." EPA's detailed comments are focused on these three types of impacts.

Direct and Indirect Impact Analysis

2. **[Social and Economic Impacts]** - The DEIS should present not only reservoir economic benefits from recreation, but the effects on expected economic and environmental (non-monetary) benefits of river recreation for each alternative. Additionally, the DEIS should identify and present the economic benefits from environmental restoration of habitat (river and reservoir) and the benefits and costs of the ecological impacts for each alternative. As recommended below, the indirect impacts of increased hunting and river fishing opportunities and other river recreation alternatives should be identified for each alternative in the DEIS.
 3. **[Tribal Government-to-Government Consultation]** - EPA is aware that the BOR has worked closely with the tribes affected by this project. However, the DEIS does not provide much detail on the efforts put forth. If information about consultations is preferred to be kept confidential, BOR should explain, so that the public and the decision-makers are aware that these issues were addressed, and explain why more detail is not presented in the DEIS.
 4. **[Surface Water/Ground Water Quantity]** - The DEIS should identify what the impacts of the surface water flows for each alternative would be on the ground water table along the river below the dam. Fluctuation of the ground water table may affect the amount of riparian vegetation along the river, the viability and abundance of wetlands, and correspondingly, the abundance of wildlife that is dependent on these particular components of the river system.
 5. **[Sediment]** - The relative benefits of sediment in each alternative should be identified in the DEIS. The DEIS should present expected environmental and recreational benefits due to changes in sediment load to stream corridor downstream of the dam. The stream has downcut since the placement of the dam. The DEIS should discuss what the effects of changes in sediment load would be on the downcut streambed. One would expect indirect impacts from changes in sediment load to the water table, instream habitat, riparian vegetation, wetlands and then wildlife associated with these resources.
 6. **[Wetlands]** - The DEIS should identify the effects of increased or decreased wetland acreage on corollary increases or decreases of wetland associated wildlife and vegetation. It should also identify how these changes are of environmental and recreational benefit.
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7. **[Wildlife and Threatened and Endangered Species (T&E)]** - The indirect effects of each alternative on wildlife should be presented in the DEIS. Alternatives presented which support native fisheries should be identified and their positive indirect impacts presented (e.g. sturgeon chub). EPA suggests BOR provide a summary of the Chapter 3 explanation about the importance and connection of cottonwoods to wildlife in Chapter 4.
 8. **[Indian Trust Assets]** - EPA suggests that the DEIS Chapter 4 include a summary of the reasons, provided in Chapter 3, which support its conclusion that the Angostura project does not have an effect on the abundance of culturally important plants. It is our understanding that the Tribes believe the project has had an effect on the abundance and presence of these plants. We additionally recommend that the BOR present the Tribes' point-of-view of the effects of this project on culturally important plants in this section of the EIS.

Cumulative Impact Analysis

9. **[Each alternative should be analyzed for its cumulative impacts (past, present and future).]** In this analysis, impacts due to the placement of the dam and its effects on the particular resource (e.g. sediment, groundwater, etc.) under examination should be presented. This is important to identify historical environmental impacts associated with the no action alternative. EPA understands BOR's citation of the "no change from current management," as their "no action" alternative. However, the Council on Environmental Quality has also said that "no action" is not equivalent to no impacts. BOR has already identified impacts from dam placement in Chapter 3. What EPA is recommending is that in the cumulative impacts analysis the past actions are included in that analysis, as required in 40 CFR Section 1508.7. The cumulative impacts analysis should be focused on the most critical receptors or resources, those that can significantly add to direct and indirect impacts.

The DEIS does not present how the cumulative effects will change for each resource under each alternative. The DEIS does present a cumulative impacts section under each impacted resource. However, the section only lists possible impacts from other projects and does not provide specific information on estimating those effects. Additionally, the DEIS does not explain the effects of these projects acting in concert with Angostura and what they are expected to be cumulatively. There should be more detail of the effects of the non-BOR projects, where the information is available, so that this can be incorporated as described above.

EPA proposes that BOR and EPA discuss this comment between the DEIS and the final EIS to determine how our recommendations can be included in the final EIS.

2. As stated on p. 93 of the EIS, lack of access below Angostura Dam affects recreational use of the river, limiting shoreline fishing, canoeing, and camping (estimates of river-related recreation below the dam were unavailable). Because of this factor—and because of the high level of recreation at Angostura Reservoir—river recreation downstream of the dam was not included in the draft EIS. Improvement in river recreation downstream of the dam in the Reestablishment of Natural Flows Below the Dam Alternative will be added to the final EIS (p. 154). This improvement could partly offset the adverse effects to reservoir recreation in this alternative. Benefits and costs of ecological impacts were not included in the EIS because ecological changes along the river would be very gradual and would be dependent on land use in the area. Any economic benefits from these ecological changes would be minute. However, Table 4.18, showing impacts on South Dakota's endangered, threatened, and rare plants and animals, will be used in the final EIS to qualitatively evaluate potential ecological benefits and costs.

3. Reclamation considered Environmental Justice and Indian Trust Assets in the NEPA process through direct consultation with the OST, CRST, and LBST (p. 1 of the EIS). OST concerns were first solicited in 1996, and Reclamation agreed to do an EIS at their behest. The OST, CRST, and LBST were among the cooperating agencies on this EIS (p. 5), and Reclamation concluded government-government agreements with each Tribe (p. 168). Scoping meetings (pp. 167-168) and public hearings were held on each reservation. Finally, Reclamation entered into a grant agreement with the OST to collect information for this EIS (Appendix Z).

4. Impacts of river flows on groundwater will be added to Chapter Four of the final EIS. Impacts to riparian vegetation can be found on pp. 139-141 of the EIS, impacts to wetlands on pp. 141-142.

5. Two of the alternatives would change releases from the reservoir to the river, and therefore have the potential to affect sediment. The Reestablishment of Natural Flows Below the Dam Alternative would increase annual releases by almost 100% in comparison to the No Action Alternative (p. 119 and p. 115 of the EIS, respectively), and would probably reduce the length of the Cheyenne River, increase exposed sediment, and reduce the area coverage of riparian vegetation (p. 139). The Improved Efficiencies Alternative would increase annual releases from 2-47½% (Table 4.10). It would probably cause the length of the river to decrease while reducing the area coverage of riparian vegetation (p. 140). Impacts to groundwater will be added to the final EIS; impacts to riparian vegetation (pp. 139-141), wetlands (pp. 141-142), and wildlife (pp. 143-145) are in the EIS.

6. Impacts to wetlands are discussed on pp. 141-142 of the draft EIS and wildlife impacts on pp. 143-145. Impacts on riparian vegetation can be found on pp. 139-141. These sections together depict the environmental impacts that would occur in the Reestablishment of Natural Flows Below the Dam Alternative, as well as the other alternatives. A section on the ecological benefits and costs of the alternatives will be added to "Social and Economic Conditions" in Chapter Four of the final EIS.

7. Though direct and indirect effects were not separated in the EIS, Reclamation believes these impacts were analyzed adequately in the "Threatened or Endangered Species" section of the EIS.

8. A summary of the reasons culturally important plants would not be affected can be found on p. 157 of the EIS. The Tribe's beliefs about the effect of the Angostura Unit on culturally important plants is on pp. 98-99.

9. Comments on cumulative impacts were discussed with EPA May 15, 2001. These sections will be revised in the final EIS to be as specific as possible and to show how cumulative impacts could differ from environmental factor to environmental factor.